

Product datasheet for **SC128161**

Her2 (ERBB2) (NM_004448) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Her2 (ERBB2) (NM_004448) Human Untagged Clone
Tag:	Tag Free
Symbol:	Her2
Synonyms:	CD340; HER-2; HER-2/neu; HER2; MLN 19; NEU; NGL; TKR1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_004448 edited
GGGCGGCCGGAATTCGGCACGAGGGGGCCGGAGCCGAGTGAGCACCATGGAGCTGGCG
GCCTTGTGCCGCTGGGGCTCCTCCTCGCCCTTTGCCCCCGGAGCCGCGAGCACCCAA
GTGTGCACCGGCACAGACATGAAGCTGCGGCTCCCTGCCAGTCCCAGAGACCCACCTGGAC
ATGCTCCGCCACCTCTACCAGGGCTGCCAGGTGGTGCAGGGAAACCTGGAACCTACCTAC
CTGCCACCAATGCCAGCCTGTCTTCTGCAGGATATCCAGGAGGTGCAGGGCTACGTG
CTCATCGCTCACAACCAAGTGAGGCAGTCCCCTGCAGAGGCTGCGGATTGTGCGAGGC
ACCCAGCTCTTTGAGGACAACATGCCCTGGCCGTGCTAGACAATGGAGACCCGCTGAAC
AATACCACCCCTGTACAGGGGCTCCCAGGAGGCTGCGGGAGCTGCAGCTTCGAAGC
CTCACAGAGATCTTAAAGGAGGGTCTTGATCCAGCGGAACCCAGCTCTGCTACCAG
GACACGATTTTGTGAAGGACATCTTCCACAAGAACAACCAGCTGGCTCTCACACTGATA
GACACCAACCGCTCTCGGGCCTGCCACCCCTGTTCTCCGATGTGTAAAGGCTCCCCTGC
TGGGGAGAGAGTTCTGAGGATTGTCAGAGCCTGACCGCCTGCTGTGCGGGTGGCTGT
GCCCGCTGCAAGGGGCCACTGCCACTGACTGCTGCCATGAGCAGTGTGCTGCCGGCTGC
ACGGGCCCAAGCACTCTGACTGCCTGGCTGCCTCCACTTCAACCACAGTGGCATCTGT
GAGCTGCACTGCCAGCCTGGTCACTACAACACAGACACGTTTGTGATCCATGCCCAAT
CCCGAGGGCCGGTATACATTCGGCGCAGCTGTGTGACTGCCTGTCCCTACAACCTACCT
TCTACGGACGTGGGATCCTGCACCCTCGTCTGCCCCCTGCACAACCAAGAGGTGACAGCA
GAGGATGGAACACAGCGGTGTGAGAAGTGCAGCAAGCCCTGTGCCCGAGTGTGCTATGGT
CTGGGCATGGAGCACTTGCAGAGGTTGAGGGCAGTTACCAGTGCCAATATCCAGGAGTTT
GCTGGCTGCAAGAAGATCTTTGGGAGCCTGGCATTCTGCGGAGAGCTTTGATGGGGAC
CCAGCCTCCAACACTGCCCGCTCCAGCCAGAGCAGCTCCAAGTGTGAGACTCTGGAA
GAGATCACAGGTTACCTATACATCTCAGCATGGCCGGACAGCCTGCCTGACCTCAGCGTC
TTCCAGAACCTGCAAGTAATCCGGGGACGAATTCTGCACAATGGCGCCTACTCGTGACC
CTGCAAGGGCTGGGCATCAGCTGGCTGGGGCTGCGCTCACTGAGGGAACCTGGGCAGTGA
CTGGCCCTCATCCACCATAACACCCACCTCTGCTTCGTGCACACGGTGCCTGGGACCAG
CTCTTTCCGAACCCGCACCAAGCTCTGCTCCACTGCCAACCGCCAGAGGACGAGTGT



[View online »](#)

GTGGGCGAGGGCCTGGCCTGCCACCAGCTGTGCGCCCGAGGGCACTGCTGGGGTCCAGGG
 CCCACCCAGTGTGTCAACTGCAGCCAGTTCCTTCGGGGCCAGGAGTGCCTGGAGGAATGC
 CGAGTACTGCAGGGGCTCCCCAGGGAGTATGTGAATGCCAGGCACTGTTTGCCGTGCCAC
 CCTGAGTGTGAGCCCAAGTGGCTCAGTGACCTGTTTTGGACTGGAGGCTGACCACTGT
 GTGGCCTGTGCCACTATAAGGACCCTCCCTTCTGCGTGGCCCGTGGCCAGCGGTGTG
 AAACCTGACCTCTCCTACATGCCATCTGGAAGTTTCCAGATGAGGAGGGCGCATGCCAG
 CCTTGCCCATCAACTGCACCCACTCCTGTGTGGACCTGGATGACAAGGGCTGCCCGCC
 GAGCAGAGAGCCAGCCCTCTGACGTCCATCATCTCTGCGGTGGTTGGCATTCTGCTGGTC
 GTGGTCTTGGGGGTGGTCTTTGGGATCCTCATCAAGCGACGGCAGCAGAAGATCCGGAAG
 TACACGATGCGGAGACTGCTGCAGGAAACGGAGCTGGTGGAGCCGCTGACACCTAGCGGA
 GCGATGCCAACCAGGCGCAGATGCGGATCCTGAAAGAGACGGAGCTGAGGAAGGTGAAG
 GTGCTTGGATCTGGCGCTTTTGGCACAGTCTACAAGGCATCTGGATCCCTGATGGGGAG
 AATGTGAAAATCCAGTGGCCATCAAAGTGTGAGGGAAAACACATCCCCAAAGCCAAC
 AAAGAAATCTTAGACGAAGCATACTGATGGCTGGTGTGGGCTCCCCATATGTCTCCCGC
 CTTCTGGGCATCTGCCTGACATCCACGGTGCAGCTGGTGACACAGCTTATGCCCTATGGC
 TGCTCTTAGACCATGTCCGGGAAAACCGGACGCTGGGCTCCCAGGACCTGTGTAAC
 TGGTGTATGCAGATTGCCAAGGGGATGAGCTACCTGGAGGATGTGCGGCTCGTACACAGG
 GACTTGGCCGCTCGAAACGTGCTGGTCAAGAGTCCCAACCATGTCAAATTAACAGACTTC
 GGGCTGGCTCGGCTGCTGGACATTGACGAGACAGAGTACCATGCAGATGGGGCAAGGTG
 CCCATCAAGTGGATGGCGCTGGAGTCCATTCTCCGCCGGCGGTTACCCACCAAGAGTGT
 GTGTGGAGTTATGGTGTGACTGTGTGGGAGCTGATGACTTTTGGGGCCAAACCTTACGAT
 GGGATCCCAGCCCGGGAGATCCCTGACCTGCTGAAAAGGGGGAGCGGCTGCCCCAGCCC
 CCATCTGCACCATTTGATGTCTACATGATCATGGTCAAATGTTGGATGATTGACTTGAA
 TGTCCGGCAAGATTCCGGGAGTTGGTGTCTGAATTTCTCCGCATGGCCAGGGACCCCGAG
 CGCTTTGTGGTCACTCAGAATGAGGACTTGGGCCAGCCAGTCCCTTGGACAGCACCTTC
 TACCGCTCACTGTGGAGGACGATGACATGGGGACCTGGTGGATGCTGAGGAGTATCTG
 GTACCCAGCAGGGCTTCTTCTGTCCAGACCCTGCCCGGGCGCTGGGGGCATGGTCCAC
 CACAGGCACCGCAGCTCATCTACCAGGAGTGGCGGTGGGGACCTGACACTAGGGCTGGAG
 CCCTCTGAAGAGGAGGCCCCAGGTCTCCACTGGCACCTCCGAAGGGGCTGGTCCGAT
 GTATTTGATGGTACCTGGGAATGGGGCAGCCAAGGGGCTGCAAAGCCTCCCCACACAT
 GACCCAGCCCTCTACAGCGGTACAGTGAAGGACCCACAGTACCCTGCCCTCTGAGACT
 GATGGCTACGTTGCCCCCTGACCTGCAGCCCGCAGCCTGAATATGTGAACCAGCCAGAT
 GTTCGGCCCCAGCCCCCTTCGCCCGGAGAGGGCCCTCTGCTGCTGCCCGACCTGCTGGT
 GCCACTCTGAAAAGGCCAAGACTCTCTCCCCAGGGAAGAATGGGGTCTGCAAAGACGTT
 TTTGCCTTTGGGGGTGCCGTGGAGAACCCCGAGTACTTGACACCCAGGGAGGAGCTGCC
 CCTCAGCCCCACCTCCTCTGCCTTCAGCCAGCCTTCGACAACCTCTATTACTGGGAC
 CAGGACCCACAGAGCGGGGGCTCCACCCAGCACCTTCAAAGGGACACCTACGGCAGAG
 AACCCAGAGTACCTGGTCTGGACGTGCCAGTGTGAACCAGAAGGCCAAGTCCGCAGAAG
 CCCTGATGTCTCCTCAGGGAGCAGGGAAGGCCTGACTTCTGCTGGCATCAAGAGGTGGGA
 GGGCCCTCCGACCACTTCCAGGGGAACCTGCCATGCCAGGAACCTGTCTAAGGAACCTT
 CCTTCTGCTTGAGTTCCAGATGGCTGGAAGGGTCCAGCCTCGTTGGAAGAGGAACAG
 CACTGGGGAGTCTTTGTGGATTCTGAGGCCCTGCCAATGAGACTCTAGGGTCCAGTGGGA
 TGCCACAGCCCAGCTTGGCCCTCCTTCCAGATCCTGGTACTGAAAGCCTTAGGGAAG
 CTGGCCTGAGAGGGGAAGCGCCCTAAGGGAGTGTCTAAGAACAAAAGCGACCCATTGAG
 AGACTGTCCCTGAAACCTAGTACTGCCCCCATGAGGAAGGAACAGCAATGGTGTGAGTA
 TCCAGGCTTTGTACAGAGTGCTTTTCTGTTTGTGTTTTTACTTTTTTTGTTTTTTTTT
 AAAGATGAAATAAAGACCCAGGGGAGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
 AAAAACTCGAC

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_004448 unedited
 CCCC GTT GCCGCAATGGGCGGTAGGCGGTACGGTGGGAGGTCTATATAAGCAGAGCTCG
 TTTAGTGAACCGTCAGAAATTTTGTAAATACGACTCACTATAGGGCGGCCGCGAATTCGGCA
 CGAGGGGGCCGGAGCCGAGTGAGCACCATGGAGCTGGCGGCCTTGTGCCGCTGGGGGCT
 CCTCCTCGCCCTTTGCCCCCGGAGCCGCGAGCACCCAAGTGTGCACCCGGCACAGACAT
 GAAGTGCAGGCTCCCTGCCAGTCCCAGACCCACCTGGACATGCTCCGCCACCTCTACCA
 GGGCTGCCAGGTGGTGCAGGAAACCTGGAACCTCACCTACCTGCCACCAATGCCAGCCT
 GTCCTTCCTGCAGGATATCCAGGAGGTGCAGGGCTACGTGCTCATCGCTACAACCAAGT
 GAGGCAGTCCCCTGCAGAGGCTGCGGATTGTGCGAGGCACCCAGCTCTTTGAGGACAA
 CTATGCCCTGGCCGTGCTAGACAATGGAGACCCGCTGAAACATACCACCCTGTACAGG
 GGCTCCCCAGGAGCCTGCGGGAGCTGCAGCTTCAAGCCTCACAGAGATCCTGAAAGG
 AGGGGTCTTGATCCAGCGGGAACCCCACTCTGCTACCCAGACACGATTTTGTGGGAGG
 ACATCTTCCACAGAACCCAGCTGGCTCTCACTGATAGACCAACCGCTCTCGGG
 CCCTGCCACCCCTGTTCTCCGATGTGTAAGGGGCTCCCGCTGCTGGGGAGAAAATTCT
 GAAGGATTGTCAAACCTGACCCCCCTGGCTGGGCCCGGTGGGCTGTCCCCCTGCC
 AGGGGCCACTGCCAATGACCGCTGGCCAAGAACAATGTGGGCTGCCGCTGGCCCGG
 GCCCCAAGCACCTCTGAATGGGCTGGCCTGGCCNCCATT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_004448 unedited
 GGAATGGCACTTCCATGCCAGAAGCACTGGGAGGGTACAGGGTCCCCCGGGATCTGT
 TAGAAACAGCTATGACCCGCGCCCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTT
 TTTTTTTTTTTTTTCCCTCCCTGGGTCTTTATTTTCATCTTTAAAAAACAAAACAAA
 AAAAGTAAAACTAAACAGAAAAAGCACTCTGTACAAAGCCTGGATACTGACACCATTGC
 TGTTCTTCCATGGGGGCGAGTACTAGGTTTCAGGGACAGTCTCTGAATGGGTCGCTT
 TTGTTCTAAACTCCCTTAGGGCCGTTCCCTTCTCAGGCCAGTTTTCTAAGCTTTTC
 ATCCCCAGATTTGAAAGAAAAAGGCCAAACTGGCTTTGGGCATTCCATGGACCCCTTA
 AATTTTATTTTGGCAGGGCCCTTAAAATCCAAAAAACTCCCCATGGCTGTTTTTTTTTC
 CAAGAAGTTGGGCCCTTCCACCCTTTGGGAACCTCCAGCCGGGAAGAAAGTTTTTTT
 TAAAAACAGTTTTCTGGGATGGGGGTTTCCCTTAAAAAAGTTCACAAAGCCCCCCCC
 CCCTTTTTTTTTCCCCCAAAAAATTAGGGCTTTTTCTTTGTTTTTAGAAGAAAAAAA
 AAAGGGTTTTTTGGGAAATTTGCCTTCTTGGTTGTAAGGGGGGGCCTCAAAAA
 CAAATTTTCTTTGGTGTTTTTTTTTCCCCCAAGGGGTGCTTTCTATAAAGAGAG
 GGGGGGGGGGAACCCCCCCCCCTT

Restriction Sites:

Please inquire

ACCN:

NM_004448

Insert Size:

4000 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: A TrueClone.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_004448.2](#), [NP_004439.2](#)

RefSeq Size: 4664 bp

RefSeq ORF: 3768 bp

Locus ID: 2064

UniProt ID: [P04626](#)

Cytogenetics: 17q12

Domains: Recep_L_domain, pkinase, TyrKc, S_TKc, YLP, Furin-like, FU

Protein Families: Druggable Genome, Protein Kinase, Transmembrane

Protein Pathways: Adherens junction, Bladder cancer, Calcium signaling pathway, Endometrial cancer, ErbB signaling pathway, Focal adhesion, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Prostate cancer

Gene Summary:

This gene encodes a member of the epidermal growth factor (EGF) receptor family of receptor tyrosine kinases. This protein has no ligand binding domain of its own and therefore cannot bind growth factors. However, it does bind tightly to other ligand-bound EGF receptor family members to form a heterodimer, stabilizing ligand binding and enhancing kinase-mediated activation of downstream signalling pathways, such as those involving mitogen-activated protein kinase and phosphatidylinositol-3 kinase. Allelic variations at amino acid positions 654 and 655 of isoform a (positions 624 and 625 of isoform b) have been reported, with the most common allele, Ile654/Ile655, shown here. Amplification and/or overexpression of this gene has been reported in numerous cancers, including breast and ovarian tumors. Alternative splicing results in several additional transcript variants, some encoding different isoforms and others that have not been fully characterized. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (1) encodes the longest isoform (a).